ST. EDWARD STATE PARK
FIELD IMPROVEMENTS

SEPA Environmental Checklist

CSP16-0073, VAR16-0133
St. Edward Ballfield
PRJ16-0097

August 2016

Revised 10/31/16

Prepared For:

City of Kenmore

Prepared By:

ESA

Contents

A. Background [help]

1. Name of proposed project, if applicable: [help]

St. Edward State Park Ball Field Improvements

2. Name of applicant: [help]

The City of Kenmore Department of Community Development

3. Address and phone number of applicant and contact person: [help]

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4. Date checklist prepared: [help]

August 4, 2016, revised October 31, 2016

5. Agency requesting checklist: [help]

The City of Kenmore

6. Proposed timing or schedule (including phasing, if applicable): [help]

Timing for construction is dependent on obtaining the lease with the Washington State Parks and Recreation Commission, obtaining permits and funding. Ballfield improvements are proposed for construction in the spring/summer of 2017 or 2018 and work is anticipated to last 4 to 6 months. Field lighting while included in the design may be constructed in a later phase. Although a five-year monitoring period is required, ten years of monitoring will occur after installation of the wetland and buffer enhancement plantings to ensure the wetland buffer mitigation performance standards are met.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. [help]

There are no future plans related to the ballfield proposal. As previously noted, lighting while included in the design may be installed as a later phase. A proposal to renovate the seminary building into a lodge at St. Edward State Park by Daniels Real Estate is a separate proposal currently under permit review (CSP16-0077 and SEP16-0078) by the City of Kenmore and under consideration for a lease with the Washington State Park and Recreation Commission. The cumulative impacts from the two proposals are addressed in the Lodge at St. Edward Draft EIS (City of Kenmore, 2016a). However, the cumulative impacts on traffic resulting from the ballfield improvements and lodge proposals are included in the traffic study for the ballfield proposal and referenced in Section B.14 of this Checklist (Fehr & Peers 2016).

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [help]

- *St. Edward State Park Ball Field Improvements Critical Areas Report and Conceptual Mitigation Plan (ESA, October 2016)*
- *St. Edward State Park Tree Protection Plan (Tree Solution Inc., August 2016)*
- *Flood lighting design information (Bruce Dees & Associates, 2016a)*
- *Comparison of synthetic turf versus natural turf (Bruce Dees & Associates, 2016b)*
- *Traffic and Parking Analysis (Fehr & Peers, May 2016, updated) and 9/27/16 memorandum of response to development review comments*
- *Public Agency and Utility Exception report (City of Kenmore, 2016b)*
- *Stormwater Technical Information Report (Perteet, July 2016a)*

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. [help]

Government approvals related to a separate proposal to renovate the seminary building at St. Edward State Park are under review. See response to Question A.7 above.

10. List any government approvals or permits that will be needed for your proposal, if known. [help]

- *Lease Agreement between the Washington State Parks and Recreation Commission and City of Kenmore*
- *City of Kenmore – SEPA review and determination; Public Agency and Utility Exception (PAUE) to vary from wetland buffer requirements; Engineering Permit; and Building Permit.*
- *Washington State Department of Ecology—Construction Stormwater General Permit*

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) [help]

The City of Kenmore proposes improvements to the existing grass ballfield area (approximately 3.5 acres) in St. Edward State Park. The site vicinity is shown in Figure 1. For additional information on the proposed project design, please refer to the St. Edward Park Sports Field plans (Perteet, 2016b).

The existing ballfields at St. Edward State Park will be renovated to a new public sports field. The City proposes a field designed to accommodate two little league fields, two youth soccer fields, one full-size soccer field, or one full size cricket field (Figure 2).

The ballfields, which have been in use for more than 80 years, cover less than 1% of the overall park acreage. The proposal would renovate the ballfields within the existing footprint to support continuing the recreational use. On January 22, 2016, a Memorandum of Understanding (Contract 16-C1507) was executed between the City and State Parks to prepare a long term lease whereby the City would improve the ballfields and manage and maintain them. The St. Edward State Park Management Plan (WSPRC, 2008) includes language regarding continuing ballfield use and states that "ballfields as recreation facilities are primarily a local government responsibility; the majority of the financial burden must be borne by local governments and local partners." On March 31, 2016 City staff gave a presentation to the Washington State Parks and Recreation Commission on the proposed ballfield improvements.

The ballfields will be shifted to the west and moved outside of the delineated wetland area, so there will be no direct wetland impacts. Installation of the synthetic turf field would cover 37,932 square feet of disturbed wetland buffer, which is currently mowed grass. Another 4,725 square feet of mowed wetland buffer would be filled during site grading, but not covered with synthetic turf. Approximately 30,000 square feet of wetland enhancement and 25,000 square feet of wetland buffer enhancement (total 1.3 acres) is proposed as mitigation for buffer impacts. Wetland enhancement will occur primarily within the palustrine emergent portion of this wetland. This area contains mowed and disturbed emergent species. Invasive species such as Himalayan blackberry would be removed, and the area replanted with native emergent and shrub species.

As part of ballfield site preparation, approximately 131,000 square feet of sod will be removed from under the field. Once the sod is stripped, a 6-inch thick layer of free-draining aggregate will be placed over the subgrade, which will be covered with a 6-inch thick plastic grating system. The field will be graded flat and covered with a non-toxic synthetic turf and contain a sand infill. The new 100,632 square foot synthetic turf field will be pervious, and a subsurface stormwater system will be installed to provide drainage for the field. Controlled stormwater detention will maintain the natural hydrology to the surrounding wetland.

Porous concrete will be used to provide a walking path around the perimeter of the fields, support the backstop posts and to provide a floor surface in the new dugouts. An ADA-accessible permeable trail, approximately 6 feet wide, will be installed to connect the western side of the fields to the parking areas and access road. Soils that are disturbed by installation of the pathways will be hydroseeded with native grass seed following construction.

Ten LED floodlight poles will be installed around the perimeter of the field to accommodate field use. Field lighting may be installed as a later phase. The proposed lighting will consist of LED floodlights mounted on 70 feet tall galvanized steel poles. The poles will be installed as close to the field as possible so as to not compromise the safety of the players, to allow for pedestrian access, and to minimize impacts to wildlife habitat in the vicinity to the extent possible. Lighting will be designed to minimize glare and light spillage. Lighting hours will be outlined in the lease agreement between the City of Kenmore and the State Park Commission.

The old backstop in the northwest corner of the field will be removed, and two new backstops will be installed. The backstops will be approximately 24 feet high and made from chain-link fencing or netting material supported by metal posts. The dugouts will also be constructed of chain-link fencing with roofs. Covered bleachers are proposed and a small equipment shed (10' x 25') will be constructed near the southwest corner of the field.

No trees will be removed. Tree protection measures will be implemented during construction in accordance with recommendations in the Tree Protection Plan (Tree Solutions, 2016). A mix of native conifers and shrubs will be planted adjacent to the north side of the field. The new plants will be installed to screen the ballfield, while still retaining some views of the ballfield and adjacent forest.

There are 220 parking stalls available for visitors to St. Edward State Park; these visitors include ballfield users and spectators. The proposed project will increase the parking supply by 19 new parking stalls. The existing strip of gravel parking on the west side of the ball field (20 parking spaces) will be paved and restriped and pavement extended to add 7 new parking stalls. In addition, the northernmost parking lot (55 parking spaces) will be restriped to add 11 new parking stalls.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [help]

The ballfield site is located east of the St. Edward seminary buildings and northwest of Bastyr University, within St. Edward State Park in the city of Kenmore, Washington (Section 23, Township 26 North, Range 4 East) (Figure 1). The park is located at 14445 Juanita Drive NE, and spans from Juanita Drive east to the shores of Lake Washington. Much of the 316-acre park is undeveloped and consists of forested habitat, steep ravines, streams and wetlands. Single-family residential areas are located north and south of the park. Arrowhead Elementary is immediately north of the park.

An existing mowed grass ballfield, the site of the proposed ballfield improvements, is located in the northeast portion of the park to the south of the entrance road. The ballfield is surrounded by forest and wetlands to the east and south. To the west of the field lies a picnic area with mature evergreen trees, a gravel parking lot, and restroom facilities.

B. Environmental Elements [help]

1. Earth [help]

a. General description of the site: [help]
(circle one): (Flat,) rolling, hilly, steep slopes, mountainous, other _____

The existing ballfield is relatively flat. The surrounding topography slopes uphill from the ballfield to the north, east, and west and slopes downhill toward a wetland to the south.

b. What is the steepest slope on the site (approximate percent slope)? [help]

The steepest slopes on the project site are approximately 30% along the eastern edge of the existing ballfield.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [help]

Soils within the existing ballfield location and surrounding area are mapped by the Natural Resources Conservation Service (2016) as Alderwood gravelly sandy loam, 6 to 15% slopes. No prime farmland is present.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [help]

Land in the immediate vicinity of the existing ballfield is relatively flat and does not appear to have unstable or landslide-prone soils. The City of Kenmore Critical Areas maps indicate that the western slopes of St.

Edward State Park along Lake Washington are an erosion and landslide hazard area. Ravines are located to the northwest and south of the site approximately one-half mile away.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [help]

As part of ballfield site preparation, approximately 131,000 square feet of sod will be removed from under the field. Once the sod is stripped, a 6-inch thick layer of free-draining aggregate will be placed over the subgrade, which will be covered with a 6-inch thick plastic grating system. The field will be graded flat and covered with a non-toxic synthetic turf and contain a sand infill. The new 100,632 square foot synthetic turf field will be pervious, and a subsurface stormwater system will be installed to provide drainage for the field. Controlled stormwater detention will maintain the natural hydrology to the surrounding wetland. The remaining approximately 30,000 square feet of sod removal area will be covered with porous concrete (approximately 16,000 square feet) or hydroseeded (approximately 14,000 square feet).

In total, approximately 6,200 cubic yards of sod and soil will be excavated from the site and disposed of offsite at a licensed facility intended for that purpose. Approximately 11,000 cubic yards of sand, gravel, and base course material will be imported to underlay the field and construct the stormwater system and pathways. All fill material will be obtained from approved site(s).

Porous concrete will be used to provide a walking path around the perimeter of the fields, support the backstop posts and to provide a floor surface in the new dugouts. An ADA accessible permeable trail, approximately 6 feet wide, will be installed to connect the west side of the fields to the parking areas and access road.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [help]

Minor and temporary soil erosion could occur as a result of clearing and grading during project construction, primarily during rainfall events. However, any potential for erosion would be minimized with adherence to best management practices (BMPs) approved by the Department of Ecology and the City of Kenmore (Refer to question 1.h. below).

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [help]

A small equipment shed 250 square feet (approximately 10' x 25') will be constructed near the southwest corner of the field, and four covered dugout/bleacher structures 1,000 square feet (each approximately 10' x 25') will be constructed adjacent to the 2 baseball backstops; the total impervious surface coverage for these structures is approximately 1,250 square feet square feet. The existing gravel parking strip west of the ballfield will be paved and restriped, adding approximately 5,000 square feet of impervious asphalt surface. The north parking lot will be striped resulting in 11 additional parking stalls. After construction, approximately 2% of the site will be covered with impervious surfaces.

Approximately 16,000 square feet of porous concrete, allowing for infiltration, will be used to provide a walking path around the perimeter of the fields, support the backstop posts and to provide a floor surface in the new dugouts. The new synthetic turf field (100,632 square feet in area) will also be completely pervious.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [help]

BMPs are physical, structural, and/or managerial practices that can prevent or reduce erosion and pollution of water caused by construction activities. The following mitigation measures and BMPs would be incorporated during construction to minimize the potential for erosion:

- *Construction of the proposed project, including all staging areas, would be restricted to the project site. Clearing limits will be marked by high visibility construction fencing.*
- *Disturbed areas that will not be paved or covered with synthetic surf will be stabilized (e.g. seeded) as soon as possible.*
- *Construction activities, temporary stockpiling and staging areas, will remain outside of wetland areas.*
- *A Stormwater Pollution Prevention Plan (SWPPP), which includes a Temporary Erosion and Sediment Control (TESC) Plan, would be required to prevent sediment transport from the project site.*
- *Erosion control measures could include use of silt fencing, stabilized construction entrance, and other measures as specified in the SWPPP.*
- *Other erosion control measures would be incorporated, as necessary, in accordance with City of Kenmore and Department of Ecology requirements.*

In addition to the above BMPs, construction of the project will be timed to occur during the dry season starting spring or summer of 2017 or 2018.

After construction, the site will be fully stabilized by the synthetic turf field, porous concrete, and hydroseeded native grass. The improved ballfield will not result in an creased risk of erosion or other impacts to the earth, as compared to existing conditions.

2. Air [help]

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [help]

Some minor, temporary increases in emissions can be expected during project construction (exhaust emissions from construction vehicles and equipment and fugitive dust). The mitigation listed in Section 2.c, would ensure that the effects of construction activities on air quality would be minimized.

After construction, no significant increase in vehicle emissions is expected. St. Edward State Park receives approximately 1 million visitors per year, most of which arrive by motor vehicle. While the proposed project will increase usage of the ballfield, the potential air quality impacts generated by an increase in traffic would be minimal compared to the existing traffic in and adjacent to the park.

Additionally, the project may result in a regional net decrease in vehicle exhaust emissions. The Kenmore area currently has a lack of youth ballfields; teams often have to travel to other areas (such as Maltby and Woodinville) for practice and games in order to access available fields. Renovation of the St. Edward State Park ballfields would increase the local availability of local youth ballfields, and could therefore reduce motor vehicle use.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [help]

There are no known off-site sources of emissions or odor that would affect the project.

c. Proposed measures to reduce or control emissions or other impacts to air, if any: [help]

Best management practices to control fugitive dust and reduce equipment emissions will be implemented if needed. Measures that could be incorporated during construction to minimize impacts to air quality include:

- *Spray exposed soil and storage areas with water during dry periods.*
- *Remove particulate matter deposited on paved roads and sidewalks to reduce mud and dust; sweep and wash streets frequently to control dust.*
- *Equip construction equipment with appropriate emission controls and mufflers.*
- *Reduce idling times of construction equipment and vehicles when not active.*

Other emission control measures would be incorporated, as necessary, in accordance with City of Kenmore and Department of Ecology requirements.

3. Water [help]

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. [help]

One wetland, designated as Wetland A, was identified in the study area. Wetland A is a palustrine emergent (PEM) and palustrine forested (PFO) wetland located along the east and south sides of the existing ballfield (Figure 3). The onsite PEM portion of Wetland A is part of the mown field and is considered degraded. The forested portion to the south is higher quality supporting large cottonwood and red cedar trees. A drainage ditch, located along the east side of the ballfield, flows south and empties into the interior of the wetland. The ditch is considered an artificially constructed drainage feature and not a regulated stream, although it is a component of the regulated wetland.

A small seasonal stream drains south and west from Wetland A to Lake Washington. The stream channel begins within Wetland A, approximately 500 feet south of the existing ballfield (Figure 4)

A linear drainage feature (ditch) is present along the west side of the ballfield. This ditch is considered an artificially constructed drainage feature and not a regulated stream or wetland.

See St. Edward State Park Field Improvements Critical Areas Report and Conceptual Wetland Mitigation Plan (ESA, 2016) for additional information.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. [help]

Yes, the ballfield will be shifted to the west and moved outside of the on-site degraded wetland. Per the Kenmore Municipal Code (KMC), Wetland A is a Class 2 wetland because it contains a forested wetland class (KMC 18.55.300). The City of Kenmore requires a 100-foot buffer for all Class 2 wetlands (KMC 18.55.330).

Although the proposed project will not have any direct permanent wetland impacts, it will result in 37,932 square feet of permanent buffer impact (Figure 3). An additional 4,725 square feet of wetland buffer would be filled during site grading, but not covered with synthetic turf. The impacted buffer is currently partially covered by the mowed grass field area. Mitigation is proposed through the enhancement of Wetland A and its remaining buffer. Wetland enhancement would occur within the PEM portion of Wetland A, which is currently mowed. Invasive species such as Himalayan blackberry would be removed, and the area replanted with native emergent and shrub species.

Part of the non-jurisdictional ditch located on the west side of the project site will be filled by the installation of the ballfield perimeter trail. The wetland ditch along the east side of the field will not be altered. The project will not directly or indirectly impact the seasonal stream which begins approximately 500 feet south of the current ballfield (Figure 4).

See the St. Edward State Park Field Improvements Critical Areas Report and Conceptual Wetland Mitigation Plan (ESA, 2016) for additional information

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. [help]

No fill material or dredge material will be placed in or removed from surface waters or wetlands.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [help]

No surface water withdrawals or diversions are necessary for project construction or operation.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [help]

No, the project site does not lie within a 100-year floodplain.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. [help]

The proposed project does not involve discharges of waste materials to surface waters. It is unlikely that any sand or infill materials from the synthetic turf could be transported to the wetland or wetland buffer. Additionally, the turf infill will be an inert, non-toxic material. The turf will be surrounded by an underdrain system with impermeable liners around the exterior of the project. This will keep runoff from the field and paths within the field underdrain and detention facility. Geotextile liners between the turf and underdrain system will keep any materials from the underdrain system. Water quality testing at the outfall on a synthetic turf field for King County showed no toxicity detected in the water samples collected, zinc and copper concentrations collected complied with state and federal water quality standards for drinking water (Bruce Dees & Associates, 2016c).

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well.

Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [help]

The proposed project does not involve groundwater withdrawals from wells or discharges to groundwater.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. [help]

The proposed project will not involve any waste discharges to groundwater.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. [help]

Surface water currently flows from the surface of the existing ballfield area south into Wetland A before entering a small stream that eventually discharges to Lake Washington. The lake is located approximately 0.5 mile from the ballfield area. There is no existing stormwater management system for the ballfield area.

The proposed ballfield improvements will use permeable synthetic turf, directly below which will be a plastic collection grid system with void space for stormwater runoff to accumulate and flow to a detention system constructed below it. Permeable pavement will be used for the pedestrian paths, and underdrains below the paths will collect runoff and route it to the detention system. Runoff from the asphalt-paved parking area along the west side of the field will sheet flow to the adjacent permeable pedestrian walkway, where it will enter the stormwater detention system. Stormwater will exit the detention system from a pipe at the southwest corner of the field, which will flow south towards Wetland A. The outfall pipe is located outside of the buffer of Wetland A.

See St. Edward Park Sport Field Stormwater Report (Perteet, 2016a) for additional information.

2) Could waste materials enter ground or surface waters? If so, generally describe. [help]

BMPs (described below in 3.d) will minimize the potential for sediment and waste materials to enter streams and wetlands during construction. No materials will be discharged to ground or surface waters as a result of ballfield improvements. The apron around the fields and northern area between the field and road will consist of native grass (replacing existing grass). The grass will not be fertilized.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe. [help]

The proposed project is not expected to affect drainage patterns in the site vicinity; runoff from the ballfield site will continue to flow to Wetland A. See St. Edward Park Sport Field Stormwater Report (Perteet 2016) for additional information.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any: [help]

The following mitigation measures and BMPs would be incorporated during construction to reduce or control surface, ground, and runoff water, and drainage pattern impacts:

- *Construction of the proposed project, including all staging areas, would be restricted to the project site.*
- *All debris and spoil material would be transported off-site to an appropriate disposal facility.*
- *A SWPPP, which includes a TESC Plan, would be required to prevent sediment transport from the project site.*
- *Erosion control measures could include use of silt fencing, a stabilized construction entrance, and other measures as specified in the SWPPP.*
- *Locating staging areas in areas that will prevent the potential of contamination of any wetland or water body consistent with project permits.*

Other erosion control measures would be incorporated, as necessary, in accordance with City of Kenmore and Ecology requirements.

See the St. Edward Park Sport Field Stormwater Report (Perteet 2016) for additional information.

4. Plants [help]

a. Check the types of vegetation found on the site: [help]

deciduous trees: *alder, black cottonwood, big-leaf maple*
evergreen trees: *Douglas fir, western red cedar*
shrubs: *salmonberry, willow, sword fern, Indian plum, trailing blackberry, Himalayan blackberry, hawthorn, thimbleberry*
Grass: *red fescue, bluegrass, creeping bentgrass*
Pasture: *mowed grasses on ballfield surface*
crop or grain: *N/A*
Orchards, vineyards or other permanent crops: *N/A*
wet soil plants: *soft rush, creeping buttercup, small-fruited bulrush, sedge species*
water plants: *N/A*

See the St. Edward State Park Field Improvements Critical Areas Report and Conceptual Wetland Mitigation Plan (ESA, 2016) for additional information. Also see the 2006 vegetation survey completed for State Parks.

b. What kind and amount of vegetation will be removed or altered? [help]

The project footprint is designed to avoid impacting existing vegetation in the wetland to the extent possible. No trees will be removed. Construction of the synthetic turf field surface and associated pervious pathways will require removal of approximately 131,000 square feet of sod. The sod consists primarily of non-native grasses (e.g., Kentucky bluegrass) with scattered weeds (e.g., dandelion and plantain).

As part of the wetland and buffer enhancement, approximately 40,000 square feet of sod would be amended with compost and rototilled prior to installation of the native shrubs and emergent plants. Invasive vegetation (primarily Himalayan blackberry) will be removed from the forested wetland areas surrounding the field.

c. List threatened and endangered species known to be on or near the site. [help]

There are no threatened or endangered plant species on the project site. The Washington Natural Heritage Program (WNHP, 2015) maps a historic occurrence of Canadian St. John's wort (Hypericum majus) approximately 2,000 feet south of the ballfield. This species is a state listed sensitive species. It was last observed in this mapped area in 1891. It is possible, though unlikely, that this species could occur within the greater St. Edward State Park.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [help]

The sports field improvements were positioned as far away from Wetland A as possible to avoid wetland impacts. The new fields will be located almost entirely within an existing mowed ballfield, minimizing the need for removal of native vegetation. Additionally, no trees will be removed.

All direct impacts to the wetland area have been avoided. Wetland and buffer enhancement would occur within the palustrine emergent portion of Wetland A; a total area of approximately 55,000 square feet will be restored. This area currently contains mowed grass and herbaceous species. Invasive species such as Himalayan blackberry would be removed, and the area replanted with native emergent and shrub species. The proposed wetland and buffer enhancement plan will provide a greater diversity and density of native plants and increase the habitat value for native wildlife species compared to existing conditions. See the St. Edward State Park Field Improvements Critical Areas Report and Conceptual Wetland Mitigation Plan (ESA, 2016) for additional information.

Figure 7 in the critical areas report (ESA, 2016) shows the approximate areas of proposed wetland and buffer enhancement. Exotic/invasive species that are present within the mitigation areas will be removed. In general, there is a low level of invasive species in the interior of the wetland; the invasives that are present (such as Himalayan blackberry) are generally located along the wetland boundary. A detailed mitigation plan will be prepared and submitted with the engineering permit; the detailed plan will include provisions for removal of invasive species.

The City will be responsible for monitoring and maintaining the mitigation area. City regulations require mitigation performance standards to be developed and at least 5 years of monitoring (following plant installation). To ensure the success of the plantings, the City will monitor the mitigation area for 10 years.

In addition, a mix of native conifers and shrubs will be planted along the north side of the ballfield as a screening measure, which will also enhance vegetation on the site. The apron around the fields and northern area between the field and road will be native grass (replacing existing non-native grass). The grass will not be fertilized.

e. List all noxious weeds and invasive species known to be on or near the site. [help]

Himalayan blackberry, evergreen blackberry, English ivy, and English holly, all included on the King County Noxious Weed List, have been identified at the project site. Although not observed on site, tansy ragwort is also mapped as occurring near the site on King County's iMAP noxious weed mapping (2016).

5. Animals [help]

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. [help]

birds: *Eastside Audubon reports that at least 28 birds are commonly seen at St. Edward State Park (2004). Bald eagle are documented to nest along the west slopes of the park (WDFW, 2016) and other birds of prey (specifically owls) are known to occur within the park (City of Kenmore, 2016a).*

mammals: *Douglas squirrel (observed); also likely coyote, raccoon, Virginia opossum, Eastern gray squirrel, brown bats and deer are also common in the vicinity of the proposal. There are three species of bats that are of conservation concern and that could occur at the park, although they are not listed in the PHS database (WDFW, 2016). According to State Parks Staff no sampling has been undertaken to document presence of these species.*

fish: *none*

amphibians: *Pacific tree frogs (potentially present in stream/wetland). A Herpetological Survey conducted 2006-2007 indicates that three salamander species are present within the stream/wetlands systems in the park: Pacific Giant Salamander (Dicamptodon spp.), Western Red-backed Salamander (Plethodon vehiculum), and Ensatina (Ensatina eschscholtzii). However, no salamander habitat is present within the project footprint; the nearest suitable salamander habitat is south of the project area, within the interior of Wetland A.*

reptiles: *garter snake (potentially present in stream/wetland)*

b. List any threatened and endangered species known to be on or near the site. [help]

There are no threatened or endangered species known to be present in the project area. Bald eagle (recently federally delisted) and pileated woodpecker (state candidate species) are documented in the greater St. Edward State Park by the WDFW Priority Habitats and Species program. Several other state or federally listed sensitive species could be present in forest or wetland habitats in the project vicinity, including western toad, Vaux's swift, olive-sided flycatcher, several species of bats, and mink (City of Kenmore, 2004).

c. Is the site part of a migration route? If so, explain. [help]

The Puget Sound area is located within the Pacific Flyway, which is a flight corridor for migrating waterfowl and other avian fauna. The Pacific Flyway extends from Alaska to South America. There are no other migration routes in the project vicinity.

d. Proposed measures to preserve or enhance wildlife, if any: [help]

Wetland and buffer plantings will provide enhanced habitat for birds, mammals and other wildlife. The Wetland A buffer area contains several wildlife nest or feeding boxes which will be left in place , and additional nest and feeder boxes will be installed. The project will not result in tree removal, and a mix of native conifer trees and shrubs will be planted on the north side of the ballfield. In addition to enhancing habitat, these plantings will screen the ballfield from the access road approach, while preserving some views of the ballfield and surrounding forest. Large, mature trees (including western red cedar) are prevalent throughout the wetland. In areas were trees are not present, this is likely due to the present of

ponding throughout all (or a majority) of the year. Therefore, additional tree plantings in the wetland are not proposed.

Removal of the existing sod would result in a minor loss of foraging habitat, although mowed grass is not considered to provide high-quality wildlife habitat. St. Edward Park contains approximately 310 acres of undeveloped habitat, most of which is forest; the project would disturb less than 1% of the total habitat within the park. Additionally, approximately 20 acres of mowed field habitat will remain in the park vicinity, near the seminary building and Bastyr University. Overall, the proposed wildlife enhancement measures described above will offset the loss of the limited habitat provided by the mown field.

Crepuscular and nocturnal species (such as owls and bats) are present in the park. These species may be attracted to or repulsed by light, which could affect foraging, reproduction, communication, and other behaviours. However, with the implementation of mitigation measures to minimize lighting impacts to light-sensitive species, it is expected that crepuscular and nocturnal species will not avoid the ballfield area. Proposed lighting mitigation measures include: limiting the use of lighting to no earlier than 3 p.m. and no later than 9 p.m.; using lighting only during scheduled gameplay; using the latest LED lighting technology to reduce the impact of glare and spill light; installation of native conifer and shrub species to buffer field lighting from the rest of the park; and installing lighting as close to the field as possible. Additionally, bat boxes will be installed in the vicinity to enhance bat habitat in the area.

e. List any invasive animal species known to be on or near the site. [help]

Rodents (e.g. rats) and Eastern gray squirrel are likely present in the project area.

6. Energy and Natural Resources [help]

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. [help]

The proposed project will require electricity to operate the LED floodlights during nighttime field use.

The synthetic turf product is expected to last at least 10 years. When the turf must be replaced, turf materials are recycled according to the requirements of the Resource Conservation and Recovery Act (RCRA) of the United States EPA. The recycling system is a heat and pressure extrusion method which processes 100% of the turf in whole, without separation. The residual product is reused in building products. The field infill material would be screened, cleaned, and reused.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. [help]

The project would not require the use of solar energy and would not affect solar energy use by adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: [help]

The only energy required post-construction will be electricity to operate the LED floodlights. LED lights were chosen during project design due to their high energy –efficiency over other options such as incandescent lighting.

7. Environmental Health [help]

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. [help]

With any construction project there is a risk of potential construction related spills or leaks. Similar risks would be incurred with this project, but all risks would be well within the range of typical construction projects and BMPs and mitigation measures will minimize risk. No toxic chemicals would be stored at the construction site, other than fuels and other construction related fluids. Fuels and lubricants would be stored on existing paved surfaces in the parking lot area.

The LED lights proposed for this project do not need to be treated as hazardous waste Unlike metal halide lights (which are not being proposing). With normal use the LED lights should last up to 50 years.

Prior to placement of the first synthetic turf field in unincorporated King County, water quality tests were conducted on an existing synthetic turf field in the City of Redmond at the downstream catch basin. Microtox and metals analyses were conducted. The study concluded that: 1) The water collected had no effect on test organisms; 2) No toxicity was detected in the water samples collected; and 3) Zinc and copper concentrations collected complied with state and federal water quality standards for drinking water

Crumb rubber (i.e. ground rubber from truck and automobile tires) will not be used, only non-toxic synthetic turf and infill material would be installed.

1) Describe any known or possible contamination at the site from present or past uses. [help]

No known contamination is present at the site.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity. [help]

There are no known hazardous chemicals or conditions present at the site that might affect the project development or design.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project. [help]

During construction, fuels, oils and grease will be used for equipment. The completed project will not result in the storage, use, or production of any toxic or hazardous materials.

4) Describe special emergency services that might be required. [help]

No special emergency services would be required at the site. In the unlikely event that an accident occurs, the local emergency service would respond.

5) Proposed measures to reduce or control environmental health hazards, if any: [help]

As described in 7a above, applicable measures would be followed to minimize release of any hazardous materials if encountered on the site and a Spill Prevention Control and Countermeasure plan will be in place prior to construction.

b. Noise [help]

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [help]

There are no sources of noise in the area which would affect the project.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. [help]

Temporary noise impacts would result during construction of the sports fields. Noise typical for clearing, filling, grading, and construction of backstops, fencing, seating and dugouts can be anticipated. Heavy machinery, including a bulldozer, trencher, grader, seeder, large trucks and power tools will be required to complete this project. Construction hours and noise levels would comply with the City of Kenmore's noise standards which limits construction noise to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday, 9:00 a.m. and 5:00 p.m. Saturday, and no construction on Sunday (Kenmore Municipal Code [KMC] Chapter 8.05.020.F). Construction is anticipated to last four to six months. Nighttime construction is not anticipated.

Post-construction, a minimal increase in human noise is expected to result from gameplay, open informal field use, and equipment noise from maintenance operations. The hours of operation and scheduling guidelines for the field will be included in the lease agreement between the City of Kenmore and State Parks Commission. The park is currently well used by visitors for a variety of activities and events which generate various levels of human noise and also existing equipment noise from maintenance operations. The majority of the park area is forested which abates noise from surrounding properties. The ballfields are also surrounded by trees which help abate noise and provide screening. The distance between the ballfields and nearby residences will further limit noise impacts; the nearest residences (Bastyr University student village) are located over 800 feet away and the nearest single-family residences are located over 1,000 away. The proposed ballfield improvement project does not include the installation of a public address system.

The City will be responsible for the operation and scheduling of the ballfields. Anticipated open play hours will be at least 24 daylight hours per week between March 1st and November 1st, with at least 4 evening open play hours (3:00 pm or later) occurring at least one weekday per week. Noise produced by field usage will comply with the City of Kenmore's noise standards (KMC Chapter 8.05.020).

2) Proposed measures to reduce or control noise impacts, if any: [help]

As stated above, the project would adhere to the City of Kenmore noise standards (KMC 8.05.020.F). The ballfield is lower in elevation and surrounded by forested areas to the south and east, and large trees on the east. The proposed planting of native conifers and shrubs along the north side of the field will further help to reduce noise impacts to the immediate area.

8. Land and Shoreline Use [help]

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [help]

The project lies within the 316-acre St. Edward State Park, which is managed by the Washington State Parks and Recreation Commission. The existing ballfield area is currently used for baseball, soccer, cricket, and other informal recreational activities. Land uses directly surrounding the 3.5-acre ballfield area include Bastyr University, the St. Edward seminary building, parking areas, and forested areas with recreational trails. Land uses outside of and in the vicinity of the park include predominantly single-family housing communities, schools, and a golf course. Lake Washington is located west of the park.

The proposal will continue the recreational use of the ballfields and will not affect current land uses.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [help]

Based on 1936 aerial photos, the site has not been used as working farmlands or working forest lands in the past 80 years.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how: [help]

No, there are no working farmlands or working forest lands on or near the proposed project site.

c. Describe any structures on the site. [help]

The existing ballfield includes chain-link dugouts, a backstop, and small bleacher seating. There are restrooms and a parking lots located west and southwest of the existing ballfield.

d. Will any structures be demolished? If so, what? [help]

The existing chain-link backstop and associated fencing will be demolished and replaced.

e. What is the current zoning classification of the site? [help]

According to the City of Kenmore's Zoning Map, the proposed project site is zoned as Parks.

The project site is designated as Recreation in the State Parks Land Classification and Long Term Boundary Map (Washington State Parks and Recreation Commission, 2008).

f. What is the current comprehensive plan designation of the site? [help]

The Land Use Plan Map from the City of Kenmore's Comprehensive Plan designates the State Park as "public/private institutions" (City of Kenmore, 2015). The Zoning Map designates the property as "Park." The Park Zone was created in 2006 (Ordinance 06-0254) as one of the zones to implement the Comprehensive Plan Land Use designation of public/private institutions.

g. If applicable, what is the current shoreline master program designation of the site? [help]

St. Edward State Park lies along Lake Washington, which is considered a Shoreline of Statewide Significance. The ballfield site is located over 2,000 from the lake shoreline, outside of the 200-foot shoreline jurisdiction zone of Lake Washington.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [help]

One wetland and associated buffer are located on the site. A seasonal stream is located approximately500 feet to the south of the site. See Section B.3 of this Checklist and the St. Edwards State Park Ballfield Improvements Critical Areas Report and Conceptual Wetland Mitigation Plan (ESA, 2016) for additional information.

i. Approximately how many people would reside or work in the completed project? [help]

No people would reside in the project area. People who may occasionally work in the area following construction include, City maintenance staff and State Parks staff.

j. Approximately how many people would the completed project displace? [help]

The completed project would not displace any people.

k. Proposed measures to avoid or reduce displacement impacts, if any: [help]

Displacement will not occur as a result of the project; therefore, no mitigation is required.

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [help]

The use of the existing ballfield site for improved sports fields is compatible with City and State Parks land use plans for the site. The lease agreement between the City of Kenmore and State Park Commission will outline terms of use and operation for the leased premises.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any: [help]

There are no agricultural or forest lands of long-term commercial significance in the project vicinity.

9. Housing [help]

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [help]

No housing units will be provided by the proposed project.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [help]

No housing units will be eliminated by the proposed project.

c. Proposed measures to reduce or control housing impacts, if any: [help]

No housing impacts would occur, so no mitigation measures are necessary.

10. Aesthetics [help]

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? [help]

The tallest structures will be the LED floodlights, which will be installed on 70 foot-tall galvanized steel poles. As previously noted, lighting may be installed as a later phase. The backstops at the northwest and southeast corners of the ballfield are planned to be approximately 24 feet high and made from vinyl coated chain link fencing material or netting. Other structures include covered bleachers (12 feet tall), covered dugouts (12 feet tall), and bull pens (12 feet tall) on the northwest and southeast corners of the field. A small equipment shed (approximately 10 feet tall) will be constructed near the southwest corner of the field.

b. What views in the immediate vicinity would be altered or obstructed? [help]

Views of the forests surrounding the ballfield site would be altered by the addition of the floodlights, dugouts, and new backstops. The proposed planting of native conifer trees and shrubs along the north side of the field will partially screen the field. From a distance the field will look like a well maintained grass field. Due to topography and dense forest cover, there are no views of the ballfield site from outside of St. Edward State Park.

c. Proposed measures to reduce or control aesthetic impacts, if any: [help]

In coordination with Washington State Parks, the City will implement several measures to lessen the aesthetic impacts resulting from the proposal. Mitigation measures to be utilized include using a turf color (such as a muted green) that blends into the natural context of the site; painting the light poles, bleachers, and backstops in black or brown; and establishing a mix of native conifers and evergreen shrubs along the north side of the field to partially screen the improved field. Other mitigation measures include reducing the height of the backstops from 28 feet to 24 feet and considering alternative backstop materials, such as netting, that could minimize the appearance of the backstops.

11. Light and Glare [help]

a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [help]

The project includes LED lighting of the athletic field. The lighting levels for the field will be designed at Class II level listed in RP-8 (Recommended Practice for Sports Lighting) by the Illuminating Engineering Society of North America. Light design and placement has been designed to have an average maintained lighting of 50 footcandles in the infield and 30 footcandles in the outfield to reduce and light impacts in the vicinity of the ballfield. Lighting will only be operational during scheduled nighttime field use.

The proposed lighting uses extensive shielding to minimize the impact of glare and spill light. The lease agreement between the City of Kenmore and the State Parks Commission will specify field lighting hours, anticipated to be no earlier than 3 p.m. and no later than 9 p.m. While the State Park Management Plan (WSPRC, 2008) for St. Edward Park did not recommend ballfield lighting, lighting technology has

significantly evolved since the plan was adopted. The lease agreement is anticipated to specify that the City may install ballfield lighting, on the condition that at the time of installation, the City use the new LED lighting technology that minimizes light spillage. In addition, the lease agreement is anticipated to specify that the State Parks Director or his/her designee shall approve final lighting specifications in accordance with the lease agreement. The City is also proposing the addition of native conifer trees and shrubs on the north side of the field to further buffer field lighting from the park.

b. Could light or glare from the finished project be a safety hazard or interfere with views? [help]

No safety hazards from light or glare are anticipated. The City is also proposing the addition of native conifer trees and shrubs on the north side of the field to further buffer field lighting from the rest of the park.

An American Medical Association (AMA) report (2016) on LED lighting was recently released; the report focuses on the human and environmental effect of LED community lighting. The report also discusses environmental impacts of outdoor LED lighting, impacts of glare, visibility, and shielding. The AMA study focused on street lighting and other dusk to dawn lighting systems, and not sports lighting systems that operate for shorter periods of time under curfew. There are no current studies that specifically address the health effects of sports lighting.

From an environmental and human health standpoint, the proposed LED field lighting system is designed to address many of the issues (e.g., disruption to nocturnal animals and human sleep patterns) discussed in the AMA report, even though the report focuses on lighting that is used from dusk until dawn. The field floodlights are designed with high efficiency optics that deliver more light to the field and not into the surrounded community. Additional shielding will also be provided to further reduce light pollution, exposure to glare, and spill light.

c. What existing off-site sources of light or glare may affect your proposal? [help]

There are no existing sources of light or glare that would impact the project.

d. Proposed measures to reduce or control light and glare impacts, if any: [help]

Several mitigation measures are proposed to minimize lighting impacts to both humans and animal species that are sensitive to artificial light (see Section B.14 for additional details on wildlife mitigation measures). These measures include: limiting the use of lighting to no earlier than 3 p.m. and no later than 9 p.mm; using lighting only during scheduled gameplay; using the latest LED lighting technology to reduce the impact of glare and spill light; installing native conifer tree and shrub species to buffer field lighting from the rest of the park; and installing lighting as close to the field as possible. As previously noted in Section 11.a above, hours of field lighting will be specified in the lease agreement between the City of Kenmore and the State Parks Commission.

12. Recreation [help]

a. What designated and informal recreational opportunities are in the immediate vicinity? [help]

Recreational opportunities in St. Edward State Park include hiking, biking, wildlife watching, picnicking, soccer, bird watching, baseball, softball, cricket, play structures, orienteering, a gymnasium, walking, summer concerts and other events, and environmental education classes.

b. Would the proposed project displace any existing recreational uses? If so, describe. [help]

The ballfields at St. Edwards have been in use for over 80 years and are currently in poor condition. Both the City and State Parks agree (refer to the recitals in the 1/22/16 Memorandum of Understanding, Contract 16-C1507), that there are mutual benefits in improving the ballfields and that a solution is a long term lease whereby the City improves, manages and maintains the fields.

The project will not displace existing recreational uses; the field will continue to be used for a variety of organized and unorganized recreational events. The purpose of the project is to enhance existing uses of the site as improved/new sports fields. The lease agreement with State Parks will specify that open, unscheduled play will continue on the field.

The City and State occasionally host special events (e.g., a summer concert series) that utilize the ballfields for parking. The improved ballfields will not be used for parking. Instead, some events could take place on the ballfields with parking moved to the field behind the seminary, where events occur today.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [help]

The purpose of the project is to enhance public recreational sports opportunities by improving the existing ballfields. Both organized and open, unscheduled play will continue.

As stated above, the improved ballfields will not be used for parking during special events; driving and parking vehicles on the field would damage the synthetic turf. Instead of using the field for overflow parking, some events could take place on the ballfields with parking moved to the field behind the seminary, where events occur today. Washington State Parks will work with event organizers and consider alternatives for event space and facilities on a case-by-case basis.

13. Historic and Cultural Preservation [help]

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [help]

There is one recorded cultural resource listed on or eligible for listing on the national, state, or local preservation registers within the proposed project area. There are also two recorded resources within the immediate vicinity of the project area. Surrounding resources include two "historic properties" (buildings or structures over 45 years of age) that have been recorded on the Washington State Department of Archaeology and Historic Preservation's (DAHP) Historic Property Inventory database; inclusion in this database is a determination by the property's age and does not necessarily reflect its significance or potential eligibility. These structures include: the St. Thomas Seminary built in 1958 (Determined Eligible) and a water tower built in 1929 (Determined Eligible).

One resource within the proposed project vicinity (St. Edward Seminary) is listed on the National Register for Historic Places and State of Washington Historic Register. The National Register nomination form (NPS, 2006) describes the seminary as containing 15 main historic resource areas (see Attachment A). The ballfields were included in the National Register nomination, part of the overall historic site. The Seminary was constructed in 1931. It served as a Catholic seminary for young men from 1931 to 1976. In 1977, because of declining enrollment and changes in the education of seminarians, the Catholic Archdiocese of

Seattle sold 316 acres, including the St. Edward Seminary, to the State of Washington for use as a state park. In 1978, the property was dedicated and received its current name, St. Edward State Park.

In 2006 a Cultural Landscape inventory was prepared for St. Edward State Park by the National Parks Service. This project identified site features which are historic and contribute to the significance of the landscape, and also identified non-contributing features. The sports field is identified as a contributing feature. Specific treatment recommendations noted in the inventory are:

1. *Continue historic sports field for active recreation.*

   Response: *Renovation of the existing sports field continues active recreation.*

2. *Preserve historic slope on east side of sports field, remove volunteer plants and restore grass slope for spectator seating.*

   Response: *The proposed ballfield improvements preserves the historic slope. Due to the presence of wetlands on the eastern side of the fields, the proposal does not include spectator seating on the slope. The proposal does include spectator seating near each of the two infields.*

3. *Maintain south end of sports field to prevent encroachment of native forest.*

   Response: *The proposed improvements are within the area of the current mowed grass field. Therefore, the south end of the field is maintained and there is no encroachment on the native forest.*

4. *Provide more seating options under trees at west side of sports field.*

   Response: *The trees on the west side of the field will be preserved. Spectator seating (covered bleachers) are proposed near each of the two infields.*

5. *Clear drainage swale at east and south perimeter of fields to preserve historic ditch line and increase drainage.*

Response: *Surface water drainage will be improved, over existing conditions. A subsurface stormwater system will be installed to provide drainage for the field and controlled stormwater detention will maintain the natural hydrology to the surrounding wetland. As the drainage swale located along the east and south sides of the field is located within a regulated wetland, it will not be disturbed (with the exception of the removal of invasive plant species).*

6. *Maintain drainage swale vegetation as mowed grass and herbaceous plants, clear of woody plants.*

   Response: *The drainage swale on the west of the field will be covered with a porous concrete walkway, which will drain to the proposed stormwater detention facility The drainage swale on the east of the field within the wetland will not be disturbed (see question 5, above). Overall, surface water drainage will be improved, over existing conditions.*

7. *Contemporary improvements may be allowed in a historic landscape. State Parks' Cultural Resource Management Policy states that contemporary additions to cultural landscapes will not change the character of physical features within the setting of resources that contribute to their cultural or natural*

significance, nor introduce uses with visual, atmospheric or audible elements that diminish the integrity of significant cultural or natural features not the public's appreciation of them.

Response: *The grass sports fields were built sometime in the 1930s and have been continuously used for active and informal recreation since. The renovated ballfields and improvements are within the current area of the mowed field and will not impact the wetland or existing trees. The proposed improvements support the continued use of the fields for active recreation. Synthetic turf results in less injury to players and requires less maintenance than natural turf. In addition, as opposed to well-maintained natural turf, synthetic turf does not use fertilizers or pesticides. Non-toxic synthetic turf and infill material would be installed*

Other accessory improvements such as bleachers, dugouts, backstops and small equipment shed support the primary active recreation use. The addition of lighting, as previously discussed in other sections, may be installed as a later phase and will be designed to minimize glare and light spillage. Lighting hours will also be included in the lease agreement between the City of Kenmore and the State Parks Commission. In addition, a mixture of native conifer trees and shrubs are proposed along the north side of the field to screen the ballfields from the access road approach and to ensure the visual integrity of the seminary building on the approach from the entrance driveway.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [help]

The project area is located near the east shore of Lake Washington. This area is in the traditional territory of the Lakes Duwamish and Sammamish peoples, whose descendants are members of the Snoqualmie Tribe, Tulalip Tribes, Suquamish Tribe, and Muckleshoot Indian Tribe. No Native American ethnographic place names were recorded on the project area; however, many were recorded along the shores of Lake Washington (Hilbert et al. 2001).

Two Native American ethnographic place names were recorded within 0.5 mile of the project area, a spot on the east shore of Lake Washington south of North Point (Li'lskut) and one named for an open space near the present town of Juanita (čiʔčubəd) There is one ethnographic place name located just beyond 0.5 mile, North Point (q3a's), early maps name North Point as Arrowhead Point (Hilbert et al. 2001; Metsker Map Company, 1936).

No archaeological resources have been recorded on or near the proposed project area. During its cultural landscape inventory of St. Edward Seminary, the National Park Service (2006) noted that the area was likely used by Native Americans for subsistence harvesting of natural resources. Trails were likely created connecting to and along the shore of Lake Washington. However, the inventory did not find definitive signs of prehistoric habitation or land use in the seminary area. The Washington State Parks and Recreation Commission (2006) has not identified any known precontact sites within the park. There are no recorded archaeological sites within 0.5 mile of the project area. Two previous professional cultural resources studies have been conducted near the project are: a historic property survey (Knapp, 1995) and a historic structures survey (LaBree, 2013). Neither included any sub-surface archaeological testing.

The sports field site, a historic resource area as described in the National Register nomination form (NPS, 2006), will be affected by the proposed sports field improvement. The specific construction date of

the existing ballfield is unknown, although it is presumed to have been constructed sometime in the 1930's. The National Park Service cultural inventory (2006) states that the field "retains historic integrity." The National Register nomination form (NPS, 2006) describes the field as follows:

"Historic photographs reveal a shifting of sports programs on the field from baseball to football to soccer. . . . The flexibility of this open space is apparent with historic and current multiple adaptations to various sports and uses. The area retains its historic land use as an organized recreational facility."

The DAHP Statewide Predictive Model classifies the project area as "High Risk - Survey Highly Advised" (DAHP, 2010). Review of historical maps, aerial photographs, and published Native American ethnographic studies provide further support that there is a high probability for encountering cultural resources beyond the project area (Hilbert et al., 2001; Kroll Map Company, 1912; Metsker Map Company, 1936; Pacific Aerials, 1937; USGS, 1949; USGS, 1968; US Surveyor General 1859).

The ballfield contains existing fill soils and no impacts to unrecorded subsurface cultural or archaeological resources are anticipated. Should previously unrecorded archaeological or cultural resources be discovered during construction, all work will stop and the appropriate agencies will be contacted. An archaeological survey may be required for the ballfield project in advance of construction. As noted in the response to Question B.13a above, the sports field was listed as a contributing feature to the St. Edward State Park historic landscape and responses are provided to the specific treatment recommendations.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [help]

As cited in response to questions 13a and 13b above, the following types of documents were reviewed in order to identify any potential cultural resources in the project vicinity: the DAHP for any recorded cultural resources; cemeteries, national, state, or local register-listed historic properties; previous studies on or near the project area; DAHP's Statewide Predicative Model; historical maps of the project area dated 1859, 1912, 1936, 1937, 1949, 1968;aerial photographs of the project area taken 1937, 1952, 1964; St. Edward State Park Management Plan (WSPRC, 2008); St. Edward Park Cultural Landscape Inventory (NPS, 2006); and ethnographic studies.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required. [help]

The continued use of the fields for sports is consistent with the historic uses described earlier. No trees will be removed and a mixture of native conifer trees and shrubs are proposed along the north side of the field to screen the ballfields and to ensure the visual integrity of the seminary building on the approach from the entrance driveway. The current visual appearance of the field is poorly maintained grass. The turf field will visually appear like well-maintained grass. However, the turf field will be screened from view by trees.

Construction would occur within the existing ballfield, an area containing fill soils. No impacts to unrecorded, subsurface cultural or archaeological resources are anticipated. As described under item B.3, the project includes measures to protect downstream water quality and would not adversely affect aquatic resources in Lake Washington that may be used by the Muckleshoot Tribe.

Should previously unrecorded archaeological or cultural resources be discovered during construction, all work will stop and the appropriate agencies will be contacted. As noted in response to Question B.13b, an archaeological survey may be required for the ballfield project in advance of construction.

As noted above in response to Question B.13a, the proposed ballfield project is following the treatment recommendations for the ballfield in the 2006 Cultural Landscape inventory prepared for St. Edward State Park by the National Parks Service. In response to Question B.12b the proposed ballfield project is following the ballfield guidelines in The St. Edward State Park Management Plan (WSPRC, 2008).

Along with the historic and cultural resource impact avoidance and minimization measures described above, the City proposes to undertake cultural landscape mitigation actions within the Park, in coordination with Washington State Parks. The mitigation measures would improve the historic integrity of three of the historic resources areas within the park: Nun's Garden, The Orchard, and The Grotto (see Attachment A).

Restoration actions at Nun's Garden would include:

- *Restoration of the gravel path and plant bed along the boundary;*
- *Removal of invasive vegetation;*
- *Removal of naturalizing shoots and seeded natives;*
- *Pruning of existing flowering shrubs to allow recognition of individual shrubs;*
- *Pruning existing trees to maintain health;*
- *Clearing vegetation back to allow room for plantings;*
- *Enhancement of the link to the access drive path;*
- *Removal of English ivy from trees; and*
- *Installation of interpretive signage.*

Restoration actions at The Orchard would include:

- *Stabilizing of orchard trees through pruning of suckers, crossing branches and removal of dead limbs;*
- *Replacement of dead historic apple trees, by propagating replacement trees from existing trees;*
- *Removal of over-story surrounding orchard and clearing vegetation less than 8 inches in diameter back 30 feet from the trunks of existing apple trees; and*
- *Installation of interpretive signage.*

Restoration actions at The Grotto would include:

- *City contribution to partial cost of re-tuckpointing the outside wall of the grotto structure;*
- *Removal of the existing pyrocantha, cryptomeria and rhododendron and replacement with matching sword ferns at the front of the grotto structure;*
- *Removal of the recently constructed redwood retaining structures and replacement to same height with with rock retaining walls to match historic detail;*
- *Removal of sarcococca, daylilies, and euonymous from planting beds, and replacement with historically appropriate varieties including huckleberry, sword fern, heather, or iris;*
- *Removal of rhododendron, sour cherry and hawthorn to ground level on west side of grotto planting beds;*
- *Delineation of access trails at the edge of the lawn leading to grotto structures; and*
- *City contribution to partial cost of relocating the storage shed 5-10 feet back from the lawn area.*

14. Transportation [help]

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [help]

St. Edward State Park is located approximately 2 miles south of SR-522 in Kenmore, Washington. Public street access to the park is provided by a signalized intersection at NE 145th Street and Juanita Drive NE.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [help]

The park is currently served by King County METRO transit route 234, which stops on Juanita Drive NE, approximately 1/3 mile from the ballfield area.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [help]

There are 220 existing parking stalls available for visitors to St. Edward State Park, including ballfield users and spectators. It is assumed that the proposal to renovate the seminary building into a lodge would keep the 220 parking space supply intact. The ballfield project will increase the 220 parking space supply by 19 new parking stalls (new total of 239 parking spaces). The existing strip of gravel parking on the west side of the ball field (20 existing parking spaces) will be paved and restriped to add 7 new general purpose parking stalls and 1 handicap stall. In addition, the northernmost parking lot (55 parking spaces) will be restriped to add 11 new parking stalls. The peak demand for parking by users and spectators (including coaches and umpires) of the renovated ballfields was estimated to be 36 parking spaces. With the proposed additional stalls, the parking demand is not expected to exceed capacity.

The parking study (Fehr & Peers, 2016) was conducted on Saturday May 7, 2016 and Tuesday May 10, 2016. The Saturday parking space count was conducted on a warm sunny day with a bike race, wedding, and eight youth baseball games at the Bastyr University ballfields. On this day, 194 (88 percent) of the parking spaces were occupied. The Tuesday parking space count was taken on a warm and sunny day with five youth baseball practices at the Bastyr University ballfields. On this day, 50 (23 percent) of the parking spaces were occupied.

The peak demand for parking by users and spectators (including coaches and umpires) of the renovated ballfields was estimated to be 36 parking spaces. With the proposed additional stalls, the parking demand is not expected to exceed capacity. However, parking demand will likely be close to capacity at peak park use times, and some circulating may be necessary for drivers. The parking analysis recommends that signage be installed to help direct park visitors to less known parking areas (e.g., the northernmost lot), which may increase utilization of these less obvious portions of the parking lot and reduce driver circulation to find available parking.

See the traffic and parking analysis (Fehr & Peers, 2016) for additional information.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [help]

The proposal will not require any new or improvements to existing transportation facilities. The traffic analysis for the project (Fehr & Peers, 2016) focused on the traffic operations impact to the intersection of NE 145th Street and Juanita Drive NE. The study analyzed the following scenarios:

- *Existing Conditions*
- *Existing Plus Project (adding the project trips from the ballfield upgrade)*
- *Future No Project (Estimate for the year 2020; assumes new trips generated by the seminary renovation to a lodge, increased traffic volumes on Juanita Drive related to regional growth, and additional growth from Bastyr University)*
- *Future Plus Project scenario (Estimate for the year 2020; adds the renovated ballfield trips to the Future No Project volumes).*

The analysis concluded that the existing signalized intersection has the capacity for the increase in vehicle trips related to background population growth over time, development of the lodge, and renovation of the ballfields. No modification to the intersection or signal would be required; however, minor modifications to the signal timing could help decrease delays, especially for vehicles leaving the park.

See the traffic and parking analysis (Fehr & Peers, 2016) for additional information.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [help]

The proposed project will not use, nor interfere with water, rail, or air transportation.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [help]

It is estimated that the ballfield renovation project would result in a maximum of 60 additional vehicular trips per day (Fehr & Peers, 2016). This trip generation estimate was based on a scenario of two games ending and two games beginning during the peak field use hour, assuming no carpooling between 2 coaches, 12 players per team, and 1 umpire. The project would not significantly increase trips by commercial and nonpassenger vehicles.

A proposal to renovate the seminary building into a lodge at St. Edward State Park by Daniels Real Estate is a separate proposal currently under permit review (CSP16-0077 and SEP16-0078) by the City of Kenmore and under consideration for a lease with the Washington State Park and Recreation Commission. The traffic and parking analysis prepared for the ballfield improvements (Traffic and Parking Analysis, Fehr & Peers, 2016) and the traffic and parking analysis prepared for the lodge proposal (Heffron Transportation, July 2016) assessed parking and the cumulative trips for both proposals.

The traffic analyses focused on the traffic operations impact at the signalized intersection of NE 145th Street and Juanita Drive. The City's standard for operations at this intersection is Level of Service (LOS) E. The existing LOS is B with a 14 second delay at the weekday PM peak and Saturday peak. The intersection is anticipated to operate at LOS C with 31.4 seconds of delay during the weekday PM peak and 31.5 seconds of delay during the Saturday peak under a scenario that includes trips generated from the ballfield, lodge and increased volumes on Juanita Drive. While the delay increases with growth in traffic over time, the intersection has sufficient capacity to accommodate the increase in vehicle trips from both the improved ballfield and the proposed lodge.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe. [help]

The proposed project will not interfere with, affect, or be affected by the movement of agricultural or forest products in the area.

h. Proposed measures to reduce or control transportation impacts, if any: [help]

As stated above, parking is generally not expected to exceed capacity after the ballfields are renovated, and the existing signalized intersection has the capacity for the increase in vehicle trips. The traffic and parking analysis study (Fehr & Peers, 2016) lists the following recommendations, that would help address conditions that could occur under a worst-case scenario:

- *Optimize signal timings at the NE 145th Street and Juanita Drive NE intersection to help decrease delay, especially for vehicles leaving the park.*
- *Add signs in the park to direct visitors to available parking.*

15. Public Services [help]

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [help]

No special emergency services would be required above what is currently provided, as the project involves replacement/renovation of existing ball fields.

b. Proposed measures to reduce or control direct impacts on public services, if any. [help]

Impacts to public services are not anticipated; therefore, mitigation measures have not been developed.

16. Utilities [help]

a. Circle utilities currently available at the site: [help]

(electricity), natural gas, (water), refuse service, telephone, (sanitary sewer), septic system, other _____

These utilities are available at the existing restroom building located southwest of the ballfield.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [help]

The proposed field lighting will require electrical power, which will be intercepted from the existing primary power line at the closest point to the field. Underground power lines would connect the primary power line to the LED floodlight poles. The installation of new electrical power poles is not anticipated.

C. Signature [help]

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Lauri Anderson for Debbie Bent

Name of signee Debbie Bent

Position and Agency/Organization Community Development Director/ City of Kenmore

Date Submitted: 10/31/16

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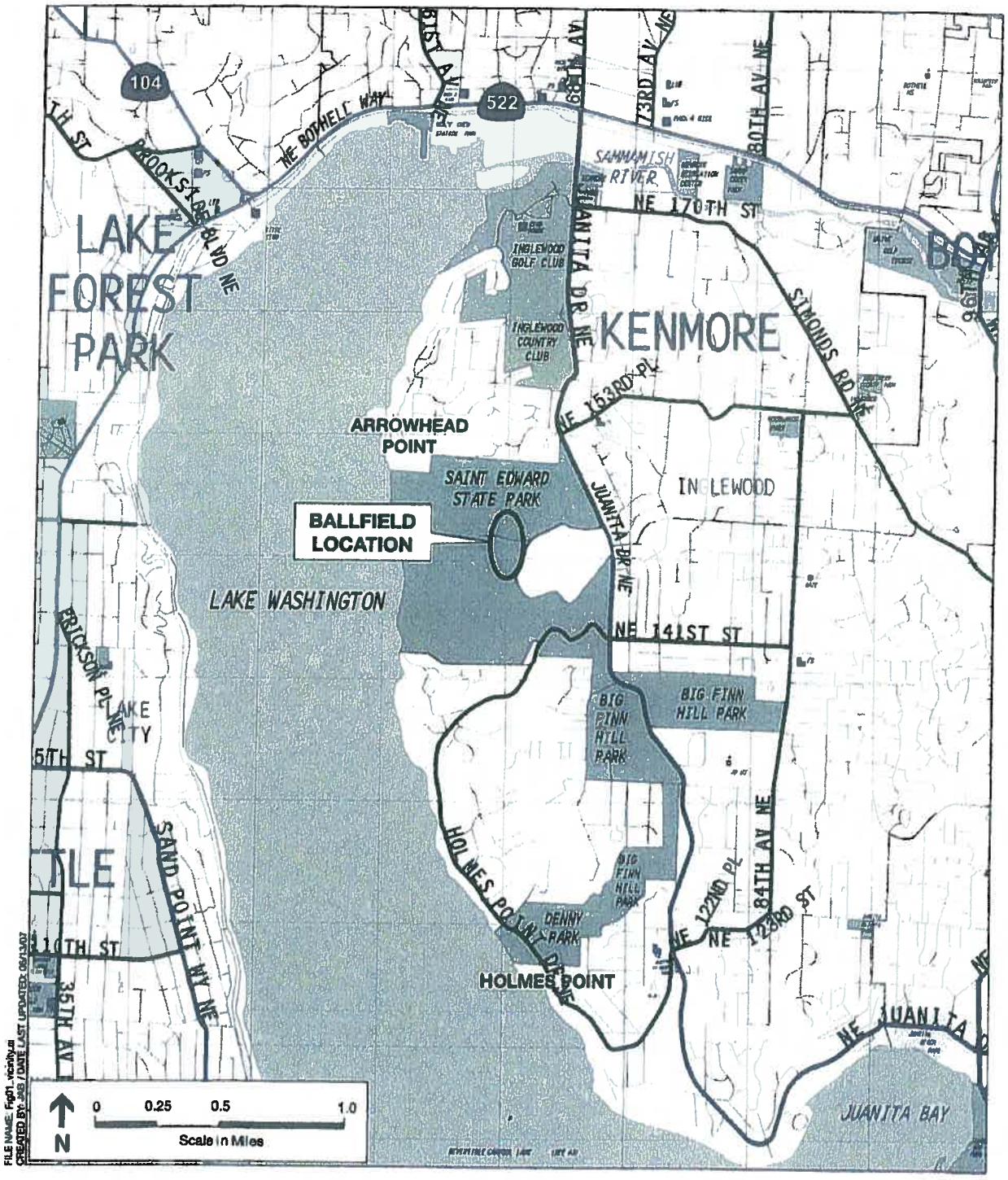
Figures



SOURCE: Rand McNally & Company, 2006.

St. Edwards Ballfield . 207014.182E

Figure 1
Vicinity Map
Kenmore, Washington

Figure 2: Site Plan

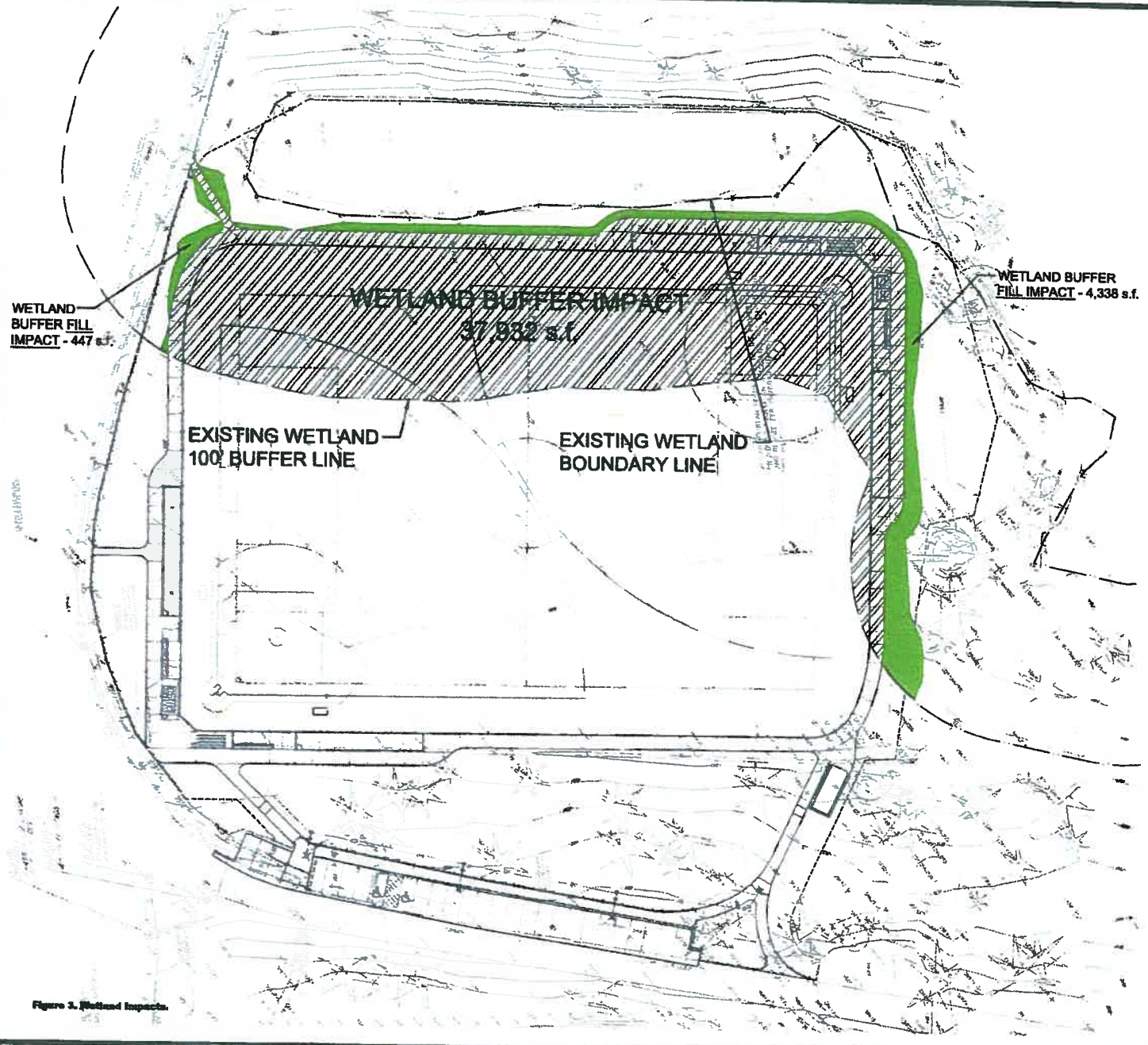


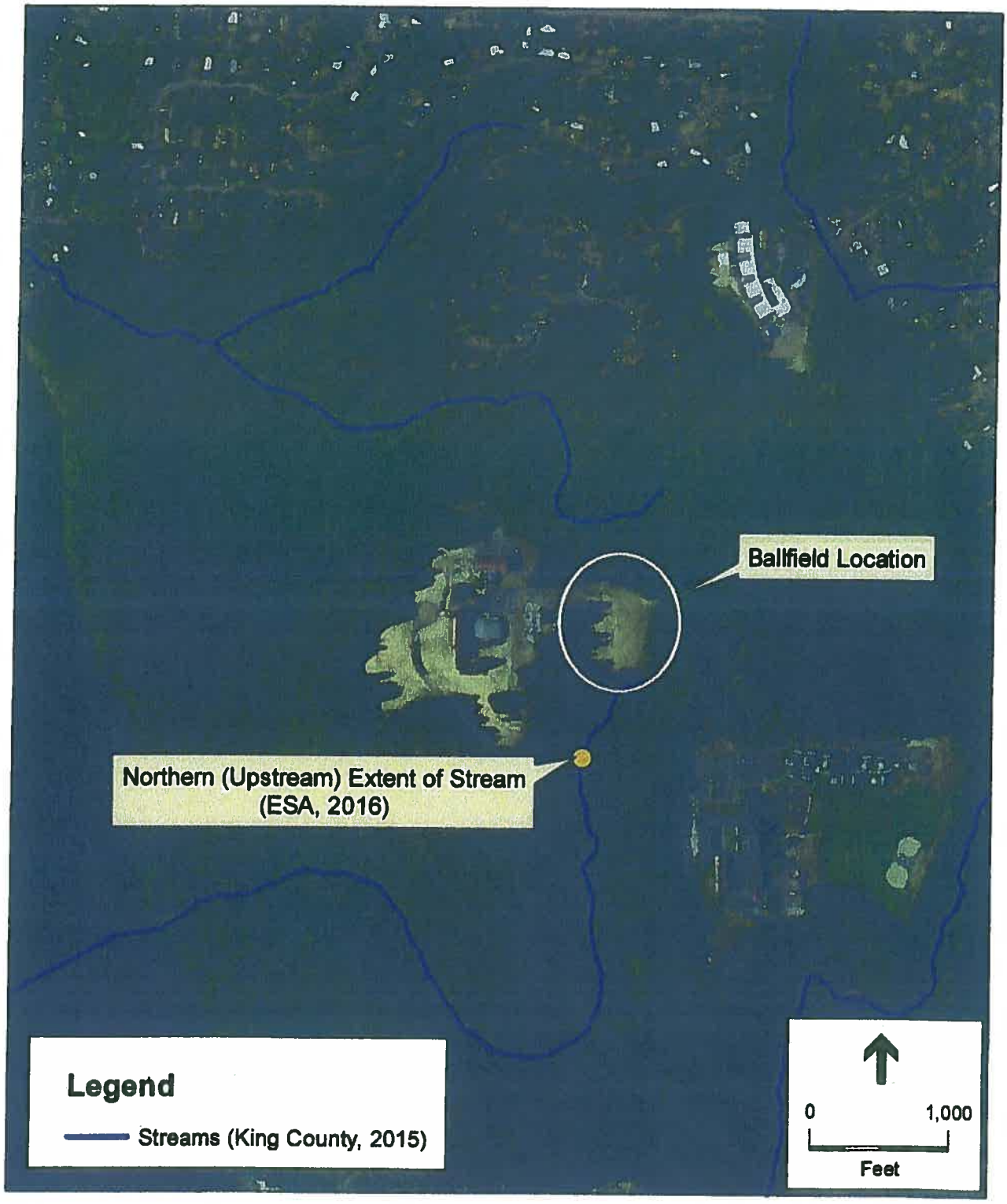
Figure 3. Wetland Impacts.

NOT FOR CONSTRUCTION - 60% SUBMITTAL

BRUCE DEES & ASSOCIATES

St. Edward Park Sports Fields
City of Kenmore, King County, Washington
WETLAND & BUFFER IMPACTS

W1.1



SOURCE: King County, 2015; ESA, 2016

St. Edwards Ballfields . 150866

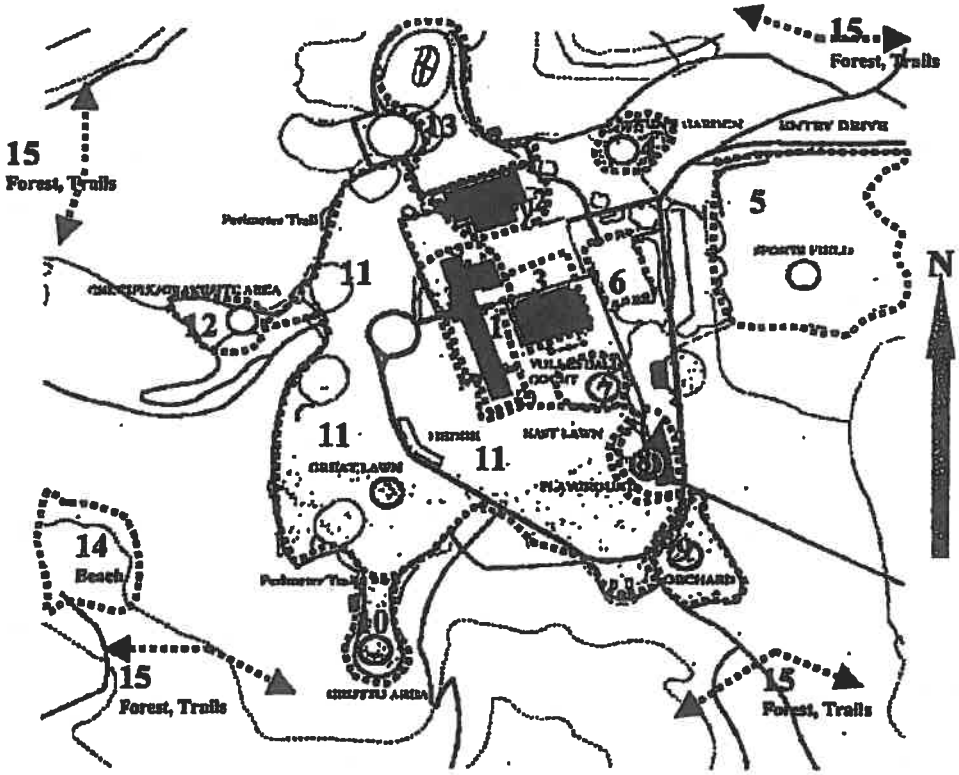
Figure 4
Stream Mapping

Attachment A:

St. Edward Park Historic Resources

Attachment A

Resource and Nominated Sites at Saint Edward State Park



Key:

1. Seminary Building, Historic Contributing
2. Gymnasium/Auditorium Building, Historic Contributing
3. Carol Ann Wald Memorial Pool Building, Non-Historic, Non-Contributing
4. Nuns' Garden Site, Historic Contributing
5. Sports Field Site, Historic Contributing
6. Ball Courts/Parking Area Site, Historic, Non-Contributing
7. Volleyball Court Site, Historic Contributing
8. Playground Structure, Non-Historic, Non-Contributing
9. Orchard Site, Historic Contributing
10. Grotto Area, Structure, Historic Contributing
11. Great Lawn, Site, Historic Contributing
12. Crucifix/Graveyard Area, Site, Historic Contributing
13. Garden/Parking Area, Site, Historic Non-Contributing
14. Beach Area, Site, Historic Contributing
15. Forest Trails, Site, Historic Contributing

(Land Use Map Courtesy of Saint Edward State Park Cultural Survey by NPS, 2006)